

pressure transmitter with thin film technology for mobile hydraulic applications Model MH-2

Applications

- Mobile hydraulics
- Mechanical engineering
- Automotive industry

Special Features

- Pressure ranges from 0 ... 60 bar to 0 ... 600 bar
- Signal outputs 4 ... 20 mA, 1 ... 5 V, 0 ... 10 V, 0,5 ... 4,5 V ratiometric @ 5 V
- Shock and vibration resistance in accordance with IEC 68-2
- Ingress protection IP 67 to IP 69K (steam jet protection)
- Stainless steel wetted parts

Description

Excellent performance

Due to its resistance to shock, vibration and pressure peaks (CDS system), combined with ingress protection up to IP 69K, the pressure transmitter model MH-2 is particularly suitable for the rough operating conditions of mobile hydraulic applications.

Even extreme temperature shocks do not affect the operational reliability of this transmitter.

Pressure ranges from 0 ... 60 bar up to 0 ... 600 bar are available to meet all standard mobile hydraulic applications.

The case consists of a highly resistive, fiberglass-enforced plastic material (PBT). This material has been successfully used in the automotive industry for many years. Inside the case a metal pod is responsible for a good EMI-protection.

The hermetically welded, dry thin film measuring cell guarantees long-term leak tightness. There are no additional sealing materials required.

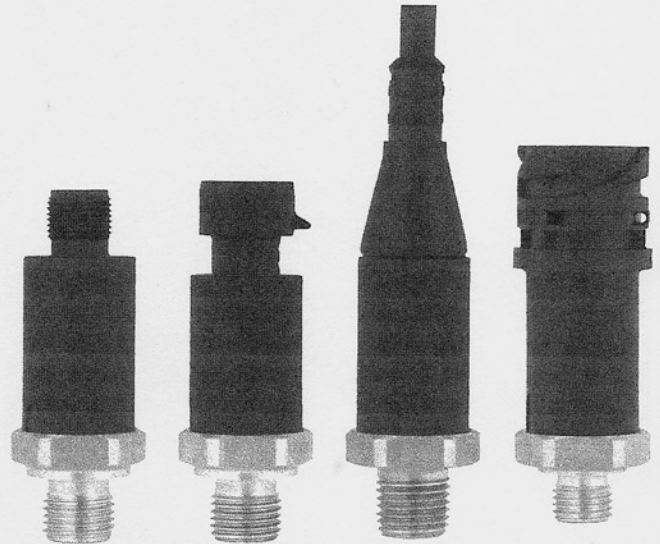


Fig. Pressure Transmitter Model MH-2

The thin film measuring cell is made of high quality stainless steel using sputtering technology to offer long-term stability especially in applications that are subject to frequent load changes.

Due to excellent EMI properties in accordance with EN 61 326, the MH-2 offers high reliability even under critical EMI conditions (up to 100 V/m).

Interesting price/performance ratio

The pressure transmitter MH-2 has been specially developed for OEM applications in the mobile hydraulic as well as automotive applications. The transmitter is manufactured on a fully automated production line, certified according to ISO/TS 16 949.

Especially for high-volume OEM requirements this product concept is particularly interesting due to its excellent price/performance ratio.

Individual versions to customer specifications

Due to its manufacturing know-how gained in many years of experience, we can offer customised solutions.

Specifications Model MH-2

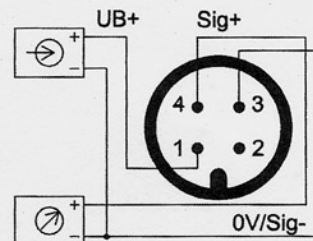
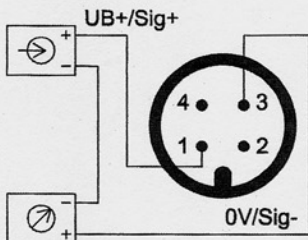
Pressure ranges	bar	60	100	160	250	400	600	
Over pressure safety	bar	120	200	320	500	800	1200	
Burst pressure	bar	550	800	1000	1200	1700	2400	
Materials		Stainless steel Highly resistive, fiberglass-enforced plastic (PBT)						
■ Wetted parts ■ Case								
Power supply U _B		Signal output			Power supply U _B		Maximum load R _A	
Signal output and		4 ... 20 mA, 2-wire			10 ... 36 DC V		R _A ≤ (U _B - 10 V) / 0.02 A with	
Maximum load R _A		1 ... 5 V, 3-wire			8 ... 36 DC V		R _A in Ohm and U _B in Volt	
		0 ... 10 V, 3-wire			14 ... 36 DC V		R _A > 2.5 kOhm	
		0.5 ... 4.5 V, ratiometric			5 ± 0.5 DC V		R _A > 5 kOhm	
		Others on request					R _A > 4.5 kOhm	
Response time (10 ... 90 %)	ms	≤ 2						
Reproducibility	% of span	Including linearity, hysteresis and repeatability.						
1-year stability	% of span	Limit point calibration						
Permissible temperature of		≤ 0.2						
■ Medium		≤ 0.3 (at reference conditions)						
■ Ambient								
■ Storage								
Compensated temp range		-40 ... +125 °C -40 ... +257 °F						
Temperature coefficients in		-40 ... +100 °C -40 ... +212 °F						
compensated temp range		-40 ... +120 °C -40 ... +248 °F						
■ Mean TC of zero	% of span	0 ... + 80 °C +32 ... +176 °F						
■ Mean TC of range	% of span	≤ 0.15 / 10K for special pressure ranges, increased TC of zero proportional to corresponding nominal pressure ranges						
CE - conformity		89/336/EWG Interference emission and compatibility see EN 61326						
		97/23/EG Pressure equipment directive						
Shock resistance	g	500 according to IEC 60068-2-27 (mechanical shock)						
Vibration resistance	g	20 according to IEC 60068-2-6 (vibration under resonance)						
Wiring protection		Protected against overvoltage and short circuiting						
		Protected against reverse polarity except ratiometric output signals						
Ingress protection per		IEC 60529 / EN 60529, see page 3						
Weight	g	Approx. 70						

Electrical connection

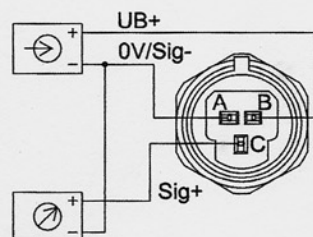
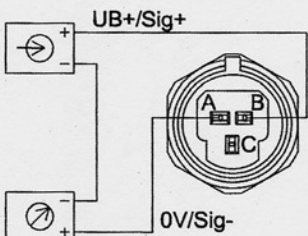
2-wire system

3-wire system

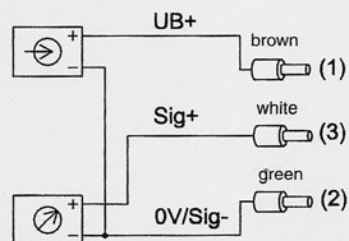
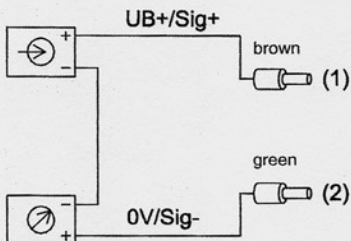
Circular connector
M 12x1



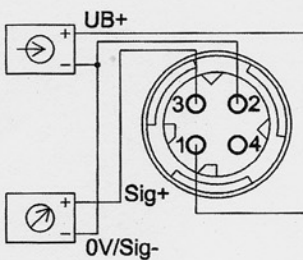
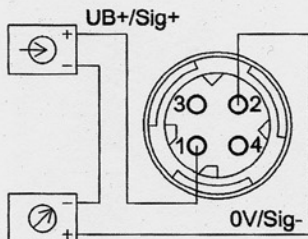
Connector
Metri Pack Series 150



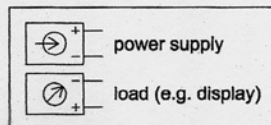
Flying leads



Bayonet connector
DIN 72 585



Legend:



Dimensions in mm

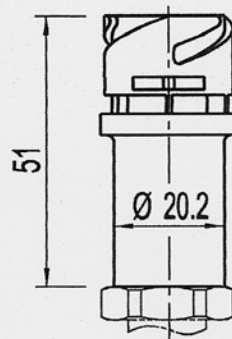
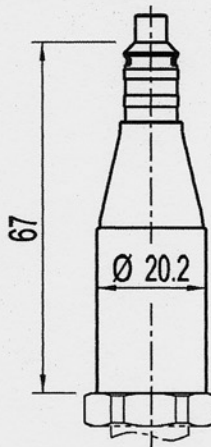
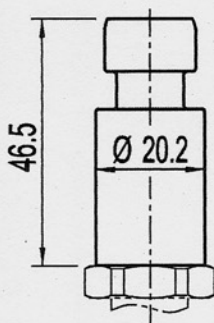
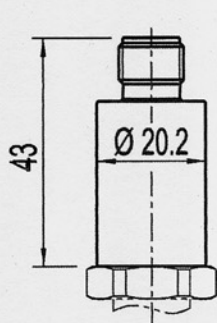
Electrical connections

Circular connector
M12 x 1, 4 pin,
IP 67
Ordercode: M4

Connector
Metri Pack Serie 150
IP 67
Ordercode: R3

Flying leads
IP 69K
Ordercode: FN

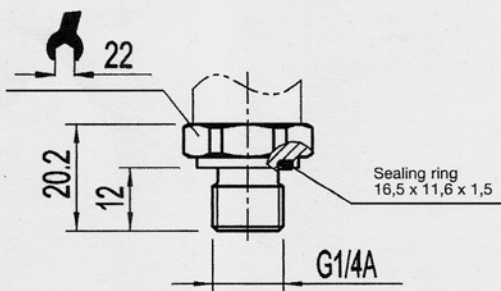
Bayonet connector
DIN 72 585, 3 pin
IP 96K
Ordercode: V3



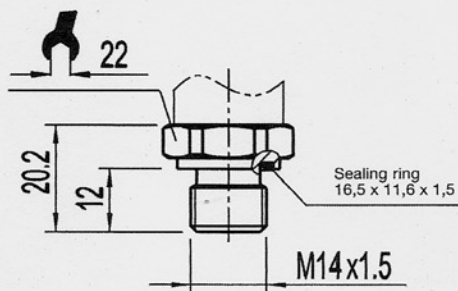
Other on request

Pressure connections *)

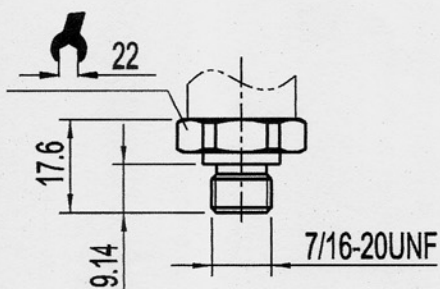
G 1/4
per DIN 3852-E
Ordercode: HD



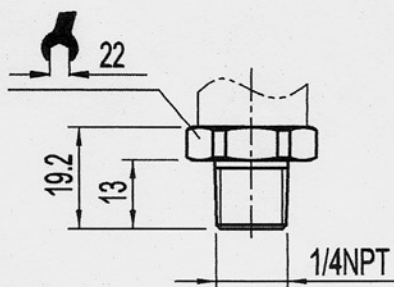
M 14x1,5
per DIN 3852-E
Ordercode: HN



7/16-20 UNF-2A
male o-ring
Ordercode: UA



1/4 NPT
per „Nominal size for
US standard tapered pipe thread NPT“
Ordercode: NB



Other on request